AN 1981:597131 CAPLUS
DN 95:197131
TI Absorption of lanthanum by the enamel surface of rat teeth
AU Kobayashi, Yasuko; Ozeki, Masami; Yagi, Toshiharu; Hosoi, Tatsuoki; Yoshizaki, Nobuya; Sakurai, Yasuo
CS Sch. Dent., Aichi-Gakuin Univ., Nagoya, 464, Japan
SO Shika Kiso Igakkai Zasshi (1981), 23(2), 253-61
CODEN: SHKKAN; ISSN: 0385-0137
DT Journal
LA Japanese
AB La(NO3)3 soln. (8%) applied to teeth of rats once a day for 2 wk prevented caries formation, displaced Ca2+ in the enamel surface by La3+, and formed LaPO4, La4(P2O7)3, LaP5O14, and LaHP2O7.3H2O. La(NO3)3 prevented the adhesion of Streptococcus mutans to the teeth and inhibited the multiplication and growth of lactobacilli. About 15% of the La3+ dose applied was detected on the enamel surface 1, 2, and 3 mo after application, but no La3+ was detected after 5 mo.

DID not use because

no claim was anticipated by this ref.

① Almost all claims require patient to have a bone disorder.
This ref → Does not have that

② Cl. 18 → requires another bone enhancing agent.

AN 1983:569039 CAPLUS
DN 99:169039
TI Distribution and fate of lanthanum in the tissues of rats administered lanthanum salt solutions - by means of swabbing the solutions on the teeth and through stomach tube
AU Sakurai, Yasuo
CS Sch. Dent., Aichi-Gakuin Univ., Nagoya, Japan
SO Aichi Gakuin Daigaku Shigakkaishi (1982), 20(1), 1-19, 3 plates
CODEN: AGDSAB; ISSN: 0044-6912
DT Journal
LA Japanese
AB In rats, the treatment of teeth with a La3+ soln. caused replacement of Ca2+ in the enamel by La3+. Those teeth contained LaPO4, LaP5O14, and LaHP2O7 when >4% La salt soln.s were applied. However, the concn. of La in the enamel decreased rapidly for a month and then decreased slowly thereafter. The daily application of La3+ solns. increased the La3+ content in the liver, spleen, and femur, and produced the max. content in 1-2 mo. In the femur, most of La3+ was incorporated into the medulla. Although La3+ was accumulated in the liver, no significant toxic effects were obsd. In rats receiving La3+ directly into the stomach, the La3+ levels in the liver, spleen, and femur at the 14th day were less than those obsd. at the 7th day. However, La3+ was continuously accumulated in the kidney.